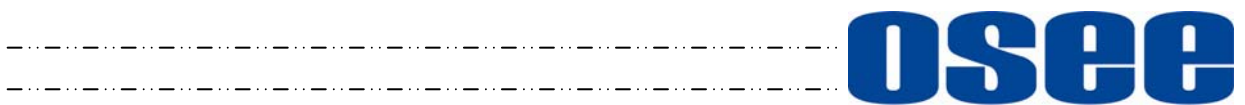


SRA6802N SD-SDI Dual
Distribution Amplifier

USER MANUAL



Product Information

Model: SRA6802N SD-SDI Dual Distribution Amplifier
Version: V010001
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Company

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SRA6802N SD-SDI Dual Distribution Amplifier

Chapter 1 Introduction

Overview

The SRA6802N is SD-SDI distribution amplifiers with equalizing and reclocking. The module has unbalanced input and output, and can compensate the cable loss for 300m of Belden 8281. The SRA6802N can automatically switch between 525 and 625 line standards.

The SRA6802N supports 2 channels of SDI inputs, and each input corresponds to 4 channels of SDI outputs. The module can be installed in 6800 series frame.

Features

The SRA6802N offers the following features:

- ✓ two channels unbalanced inputs
- ✓ Eight unbalanced outputs
- ✓ Reclocking
- ✓ 300m of Belden 8281 auto equalizing
- ✓ Hot-swappable module
- ✓ SNMP control

FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.
 Increase the separation between the equipment and receiver.
 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 Consult the dealer or an experienced radio/TV technician for help.

Module Descriptions

The Front Part of Module

Figure 1-1 shows the part of SRA6802N board

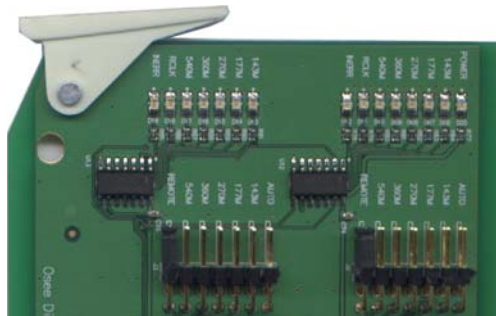


Fig. 1-1 the Part of SRA6802N Board

Back Connector



SRA6802N

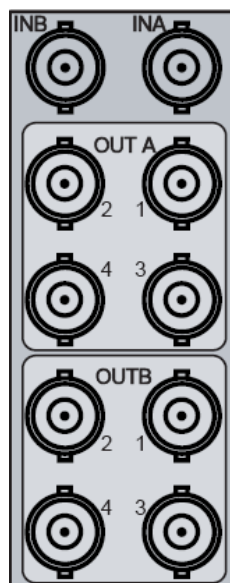


Fig.1-2 Back Connector of SRA6802N

Tab. 1-1 Description of SRA6802N Back Connector

Item	Description
INA	SDI input, channel A
INB	SDI input, channel B
OUTA1	SDI output, channel A
OUTA2	SDI output, channel A
OUTA3	SDI output, channel A
OUTA4	SDI output, channel A
OUTB1	SDI output, channel B
OUTB2	SDI output, channel B
OUTB3	SDI output, channel B
OUTB4	SDI output, channel B

Signal Flow

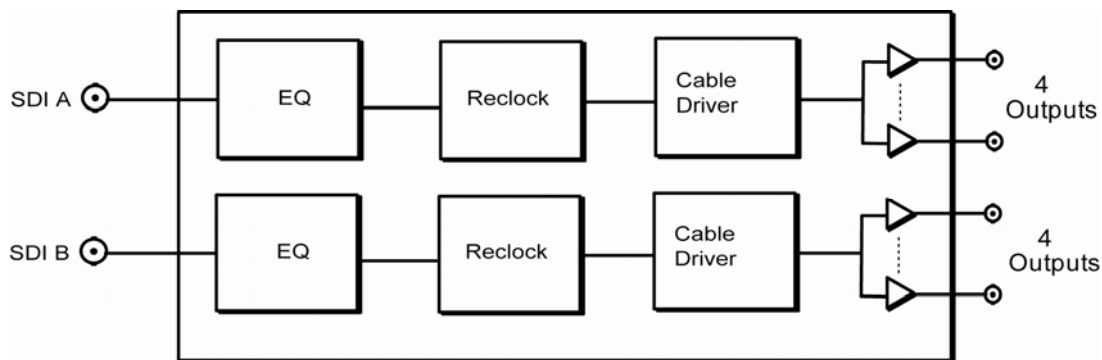


Fig. 1-3 Signal Flow of SRA6802N

Chapter 2 Installation

Overview

The power consumption for module and the maximum power ratings that frame can sustain have to be confirmed before installing the module.

In this chapter, the following topics on installation process for SRA6802N are discussed below:

- Unpacking the module
- Installing the module
- Making the connections
- Removing the module

Maximum Power Ratings for Frame

The maximum power ratings that different types of frames can sustain are listed in the Table 2-1

Tab. 2-1 Maximum Power Consumption

Frame	Maximum Voltage	Redundant Power Supplies	Numbers of Slots
6800N-1U	40W	Yes	4
6800N-2U	60W	Yes	10

Unpacking the Module

Preparing the Product for Installation

Contact your dealer right now if any items are missing.

Follow the procedures below before installing the module:

- Check the equipment for any invisible damage that may have occurred during transit.
- Confirm all the items listed on the packing list have been received.
- Remove all the packing material including electrostatic-resistant packing.
- Retain these packing for future use.

Check the Packing List

Tab. 2-2 Packed Components

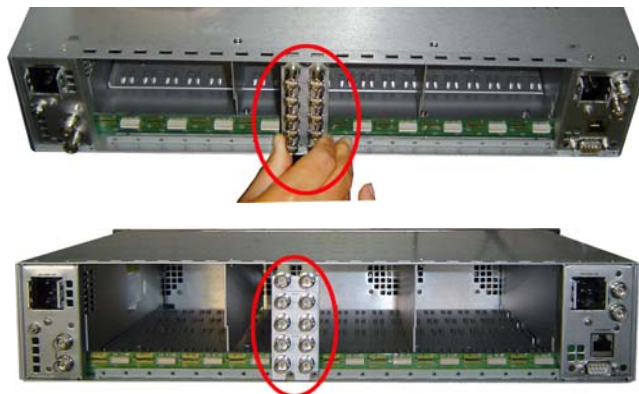
Model Name	Description
SRA6802N	SRA6802N module (1pc); back connector (1pc), and other accessories

Installing the Module

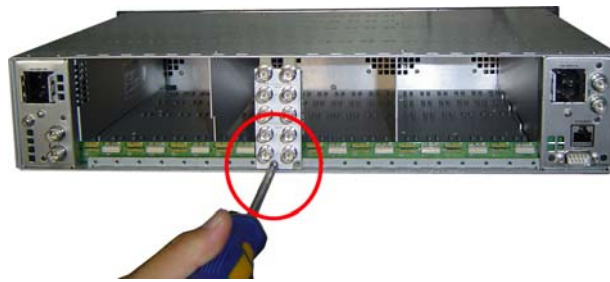
Caution: Static electricity may cause sensitive semiconductor out of order. Avoid installing or removing the module in the electrostatic-induced environment.

Follow the following steps to install the module:

Step 1



Step2



Step3



Step 4



Step5



Fig. 2-1 Installation of 2U Frame of 6800N Series

- ✓ Locate the position for back connector and insert the back connector
- ✓ Fasten the screw to fix the back connector.
- ✓ Locate the slot for module.
- ✓ Get the module installed in the slot, push the module slightly along the slot, press module again to confirm that the module is installed firmly and then close swivel handle.
- ✓ Install the front panel.

Making the Connections

Please connect signals based on Fig. 1-2.

Removing the Module

Follow the following steps to remove SRA6802N module:

1. Open the front part of frame.
2. Open the swivel handle to the full.



3. First make sure the frame stands firmly, and then pull the module gently along the slot till out of frame.
4. Install the front panel.

Chapter 3 Operation and Control

Setting Jumper

There exist three 3-pin jumpers, and the following table gives their definition.

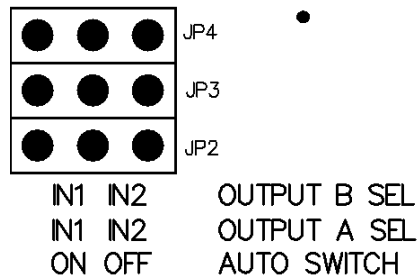


Figure 3-1 Position of JP2、JP3 and JP4

Table 3-1 Description of JP2、JP3 and JP4

Item	Description
JP4 (OUTPUT B SEL)	IN1 output B choose the first video input
	IN2 output B choose the second video input
JP3 (OUTPUT A SEL)	IN1 output A choose the first video input
	IN2 output A choose the second video input
JP2 (AUTO SWITCH)	ON switch two inputs automatically
	OFF two channel mode is set compulsorily

LED Indicator

If setting JP2 at AUTO, input signal is auto-detected.

Set signal format by choose jumpers (540M,360M,270M,177M,143M) .

Note: please set only one option of the jumpers.

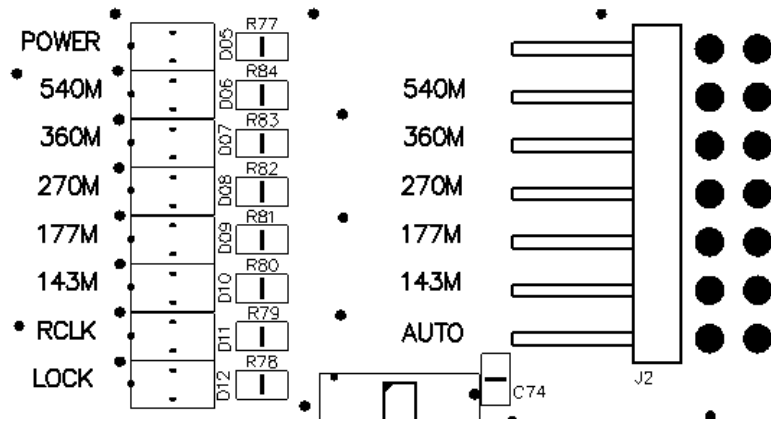


Figure 3-2 LED indicator and related jumper

Table 3-2 Description of LED indicators

Item	Description
POWER (green)	On: Power is supplied normally
540M (green)	On: set signal at 540M, the equalization distance is 540m
360M (green)	On: set signal at 360M, the equalization distance is 360m
270M (green)	On: set signal at 270M, the equalization distance is 270m
177M (green)	On: set signal at 177M, the equalization distance is 177m
143M (green)	On: set signal at 143M, the equalization distance is 143m
RCLK (green)	On: the format which is set is compatible with the input signal
INERR (red)	On: no signal input

Chapter 4 Specifications

In this chapter, the specifications in the following subjects are introduced:

- ✓ SDI Video Input
- ✓ SDI Video Output

SDI Video Input

Table 4-1 SDI Video Input Specifications

Item	Parameter
Standards	SMPTE 259M-C, 270 Mbps, 525/625 SDI Component
Impedance	75Ω termination
Return Loss	>18dB to 360MHz
Connector	BNC (IEC169-8)
Equalization	Auto to 30dB@270 Mbps

SDI Video Output

Table 4-2 SDI Video Output Specifications

Item	Parameter
Standards	SMPTE 259M-C, 270 Mbps, 525/625 SDI component
Connector	BNC (IEC169-8)
Impedance	75Ω
Return Loss	>18dB to 270MHz
Signal Level	800 mV ± 10%
DC Offset	0 V ± 0.5 V
Rise/Fall Time	400 to 1500ps (20% to 80% of amplitude)
Overshoot	<10%
Jitter	<0.2 UI (740ps) Peak

Note: Specifications are subject to change without notice

Warranty for osee product

What the warranty covers:

osee warrants its products to be free from defects in material and workmanship during the warranty period of two year from purchase date. If a product proves to be defective in material or workmanship during the warranty period, osee will, at its sole option, repair or replace the product with a similar product. The replacement unit will be covered by the balance of the time remaining on the customer's original limited warranty.

No sales personnel of the seller or any other person is authorized to make any warranties other than those described above, or to extend the duration of any warranties on behalf of osee, beyond the time period describe above.

This warranty is extended to the first consumer only, and proof of purchase is necessary to honor the warranty. If there is no proof of purchase provided with a warranty claim, osee reserves the right not to honor the warranty set forth above. Therefore, labor and parts may be charged to the consumer.

What the warranty does not cover:

1. Any product on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from:
 - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product
 - Repair or attempted repair by anyone not authorized by osee
 - Any damage of the product due to shipment.
 - Removal or installation of the product.
 - Causes external to the product, such as electric power fluctuations or failure.
 - Use of supplies or parts not meeting osee product's specifications.
 - Normal wear and tear.
 - Any other cause which does not relate to a product defect.